# FACT SHEET

# United States Department of Energy Grand Junction Office

# Monticello Wetlands

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This fact sheet describes wetlands in and around Monticello, Utah, and what the U.S. Department of Energy (DOE) is doing to restore wetlands that are adversely affected by Monticello cleanup project activities. The purpose of the Monticello cleanup projects is to minimize risks to the public and the environment from exposure to uranium mill tailings and radon gas. The cleanup is being performed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), also known as Superfund.

### Wetlands Background

A wetland is an area along a waterway, body of water, spring, or seep where soils are saturated by surface water or ground water often enough to support vegetation that has adapted to such conditions. While some wetlands are extensive, a wetland also can be an isolated area surrounded by drier land.

Approximately 48 acres of wetlands are present on the Monticello Mill Tailings Site and vicinity properties. These areas include perennial and intermittent streams, emergent wetlands, stock ponds, and depressions. Approximately 12.4 acres of these wetlands will be affected by the remedial action activities of the Monticello cleanup projects. Figure 1 shows a portion of the wetlands along Montezuma Creek—one of the largest Monticello wetlands to be affected by cleanup activities.

Figure 1. Portion of Montezuma Creek Wetland

# Wetlands Functions and Benefits

Wetlands serve valuable functions in the environment by providing habitats for birds, wildlife, and other organisms; a mechanism for water purification; and reservoirs for floodwater. In addition, wetlands filter and stabilize sediment and reduce dispersal of toxic substances. Wetlands provide open space and recreational opportunities for human communities.

# Wetland Types

Wetlands on the millsite and vicinity properties are divided into five types:

- Perennial streams—waterways with uninterrupted year-round flow.
- Intermittent streams— waterways with seasonal surface-water flow.
- Emergent wetlands—areas regularly saturated with ground water, such as seeps or springs.
- *Depressions*—low-lying areas where surface runoff collects.
- Stock ponds—diked or impounded areas that obstruct the flow of water and collect water for use by livestock.

# Wetlands Master Plan

The Monticello Wetlands Master Plan was developed to establish the overall strategy for safeguarding and restoring all Monticello wetlands during the remedial process. The goal of the Master Plan is to ensure that CERCLA cleanup activities comply with wetland regulations and guidance. The plan specifies that adverse effects to wetlands be avoided where possible. Any adversely affected wetlands must be restored or replaced at another location.

Reclamation will emphasize the restoration of wetland functions, minimization of erosion, and prevention of weed encroachment. The affected Monticello wetlands will be restored in their original locations where possible. Revegetation efforts will

emphasize the use of seed from regional plants. The chosen species will be nontoxic to livestock and wildlife and will include native grasses, sedges, rushes, willows, and other wetland plants.

# Monitoring

Annual monitoring of each Monticello revegetated wetland begins one growing season after restoration. Monitoring will continue for 3 years or until the wetland is well established and functional. Wetland delineations will be conducted in the third year following restoration to verify restored acreage (see Figure 2). Annual monitoring reports will be submitted to the U.S. Environmental Protection Agency and the State of Utah.



Figure 2. Wetland Delineation During Monitoring